Khanasumari Records and the Statistical System of India

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A b s t r a c t

Professor P.C. Mahalanobis considered that modern statistics is the result of fusion of two originally distinct disciplines, "one primarily descriptive, concerned with the collection of data, the other analytic, associated with concepts of chance of probability". He cited examples of (i) Arthasastra of Kautilya; 3rd Century B.C. (ii) Ain-i-Akbari Circa 1590 A.D., and (iii) Survey of Eastern India by Francis Buchanan, 1807-15 A.D.

The term statistick was used for the first time in 1749 by Gottfried Achenwall. The first scientific study of national resources occurred with the publication of Cosmographies by Sebastian Franck and Sebastian Munster (1534 and 1540) dealing with geography, history, military strength, etc. In precosmographies' era, collection of quantitative information was perhaps prevalent in all countries in some form or other; mention may be made of Domesday Book of England (1086) which contained name of place, name of the holder, number of serfs as well as extent of wood, meadows, pasture, mills, etc. The theory of probability may be traced in a rudimentary form in the sixteenth century. Upto the early decades of the nineteenth century, no successful attempts were made to connect the theory with social phenomena.

The descriptive statistics or statistical enterprise to collect data on natural and social phenomena on the basis of an enumeration type of enquiry seems to be prevalent in India since the days of Kautilya. In 1807, Dr. Francis Buchanan mentioned "a list called Khana Shumari, consisting of a statement of number of the houses, families, tradesman, castes, ploughs, looms, tanks and other public works, civil and religious, within the jurisdiction of the magistrate which is usually kept under all native governments and seems to be useful." Colin Mackenzie, later on the first Surveyor-General of India and Fellow of the Royal Society collected such Khana Shumari statistics in 1809-14 in the Ceded Districts following his predecessors. One such unpublished table of the "District of Giddaloor" now in Kurnool in Andhra Pradesh has been elaborated in this paper. A survey of encyclopaedias and dictionaries in various Indian languages seems to confirm the statement made by Francis Buchanan indicating a high status of descriptive statistics in the administrative system of India.

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1. Introduction

1.1 Professor P.C. Mahalanobis considered that modern statistics is the result of fusion of two originally distinct disciplines, "one primarily descriptive, concerned with the collection of data, the other essentially analytic, associated with concepts of chance of probability".[1] He cited three examples from India: (1) Arthasastra of Kautilya : 3rd Century B.C. (2) Ain-i-Akbari : Circa 1590 A.D. and (3) Survey of Eastern India : 1807-15 A.D.

1.2 The Arthasastra of Kautilya contains the earliest reference to a statistical system relating to enumeration, collection and compilation of socio-economic data. "The third [Municipal] Board was responsible for systematic registration of births and deaths..."[2] "Also having numbered the houses as tax paying and non-tax paying, he [the Gopa] shall not only register the total number of the inhabitants of all the four castes in each village, but also shall keep an account of exact number of cultivators, cowherds, merchants, artisans, labourers, slaves and biped and quadruped animals".[3]

1.3 According to Professor Mahalanobis, "In another peak period of Indian history, in the time of great Akbar, we find a description of highly developed statistical system in Ain-i-Akbari which is practically the administration report and statistical return of his Government as it was in 1590 A.D."[4] This document was and is being used constantly to build up quantitative estimates of land use, natural resources, population, production and consumption".[5] Some other works of statistical nature are of considerable significance like Mirat-i-Ahmadi.[6]

1.4 W.W. Hunter was appointed as the Director-General of the Statistical Survey of India in 1869 and in his very first report, he said, "I found myself therefore, in the position of a man who had unexpectedly fallen heir to the hoarded accumulation of a century, accumulation scattered over a great empire in unsifted heaps, but containing precious materials for the fabric which the Government of India resolved to raise".[7] The massive data remained practically unseen and unutilised, only a fragment has been used.

1.5 Thomas Munro is one of the most pioneer statistical investigators. Incidentally he visualised an India free of alien rule as early as 1824 in his last Despatch to the Court of Directors. He was the Principal Collector of Ceded Districts, a territory obtained from Tipu Sultan now partly in Mysore and partly in Andhra Pradesh contained mostly in the districts of Anantpur, Kudappa, Bellary and Kurnool.

1.6 At the junction of the eighteenth and the nineteenth century, we find Colin Mackenzie who was the first Surveyor General of India during 1815-1821 and won the distinction as a Fellow of the Royal Society (FRS) by virtue of his work in India. The Governor-General appointed Captain Colin Mackenzie in September 1799 to undertake "a survey on an extensive scale of the territories lately subjected to the Company by the Raja of Mysore;... the attention of the surveyors should not be confined to more military or geographical information but that his enquiries should be extended to a statistical account of the whole country".[8]

1.7 In the Catalogue of MSS in the India Office drawn up for the purposes of the Imperial Gazetteer and appended to W.W. Hunter's Quinquennial Report on the Statistical Survey of India, 1876, the following description occurs:

> Statistic and Geographical Survey of the North-East Provinces of the late Mysore Dominions, ceded to the Hon'ble English East India Company, by the Treaty of Mysore of June 1799... from the Survey executed between 1809 till 1811... Madras, January 1st, 1816. (Signed) Colin Mackenzie, Surveyor General of India. In two folio volumes on pages 769 and 632 respectively. Throughout in a tabular form, containing Registers of Villages, Statistic Tables, Description of Limits, comprising Statistic Tables or Khana shumaris, Village Register or Dihizada... / emphasis ours /

In a review in 1815, Mackenzie submitted "a sketch of The Southern portion of the Peninsula of India, showing different surveys executed" and among the list of provinces and districts on which Geographical, Statistical, and Historical Memoirs were already formed or were in preparation contained a mention of Ceded districts with an area of 28,989 square miles covered.

1.8 We have been able to discover a set of unpublished records of Ceded Districts at the National Archives of India surveyed under the direction of Mackenzie in the years 1809-15. A sample list of such records is given in Appendix - 1. In this paper, we shall explain the status of Khana Sumari in the statistical system of the day. And in doing so, we should, perhaps, speak a few words on the status of statistics up to early decades of the nineteenth century. The term statistik was used for the first time in 1749 by Gottfried Achenwall".* The first scientific study of national resources occurred with the publication of Cosmographies by Sebastian Franck and Sebastian Munster (1534 and 1540) dealing with geography, history, military strength, etc. In pre-comographies' era, collection of quantitative information was prevalent in all countries in some form or other, mention may be made of Domesday Book of England (1086) which contained the name of the holder, number of serfs, freeman as well as the extent of wood, meadows, pasture, mills, etc. The theory of probability may

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* He defines Statistics as the description of the constitution in a wider sense viz., whole complex of remarkable facts regarding a State ("Staatsmerkwurdigkeiter).

be traced in a rudimentary form in the sixteenth century. Cardan, a celebrated gambler, made the real beginning. Later on, it was also mentioned by Galileo. Upto the early decades of the nineteenth century, no successful attempts were made to connect the theory with social phenomena.[9] Our discussion in the next section is, therefore, concerned with descriptive statistics only.

2. Khanasumari and the Statistical System

2.1 The descriptive statistics or statistical enterprise to collect data on natural and social phenomena on the basis of an enumeration type of enquiry or collection of returns from the lowest level of village officials like village-headmen was perhaps widely prevalent in India. In 1807, Dr.Francis Buchanan mentioned "a list called Khana Shumari, consisting a statement of number of the houses, families, tradesman, castes,ploughs, looms, tanks and other public works, civil and religious, within the jurisdiction of the magistrate which is usually kept under all native governments and seems to be useful".[10] In the catalogue of Mackenzie manuscript the term "Khanashumaris" was used for "Statistic Tables" which, in modern usage is written as "Statistical Tables".

2.2 Richard Jenkins mentioned that "under the Mahratta Government, there exists a kind of ground work for a census in most of the districts, in what is called the Khana Shoomaree or annual enumeration of the houses of each district, with a specification of the castes and professions of each householder, and other particulars, made by Government officers, for the purpose of adjusting the Pandree dues of the Government. A census which was ordered by the Resident in 1819 was only an extension of this plan, and made through the Purgunnah officers and Putels of Villages, each of whom is fully competent to give an actual master of all the inhabitants of his village".[11] The Report on

the Population Estimates of India (1820-30) contains a number of 'Dazajadda' and 'Chanashoomaree' tables of Travancore and Cochin States surveyed by P. Conner and Lt. Ward by 1816.

2.3 In course of subsequent searches, we have discovered a number of unpublished Khanasumari tables at different Archives mainly relating to South India. A survey of Encyclopaedia and Dictionaries in major Indian languages reveals that Khanasumari was accepted as a system resembling a count of hour and other resources including population as shown in the Appendix 2 of this paper. We shall examine and discuss the Khanasumari table of only one tract called the "District of Giddaloor" forming a part of the Ceded Districts surveyed by Mackenzie. In a brief survey of the nature and contents of the table, we hope to indicate the essential features of the system.

2.4 The Survey of India Memoir No.34 (p.31) for 1813 contains the 'Chanashoomari of the District of Giddaloor for the cycle year Angeersa or A.D. 1812" received from Rahgavenderror Tasildar and Ternsillrow Sherashtadar on the 6th day of January 1813". The Khanasumari Table is divided into two parts: Part I is an enumeration of resources and Part II is that of castes. The former contains 81 columns and the latter 76 columns. The first part of the table is divided into the following blocks.

1. srl.no. and names of the Summutts [col. 1-2]
2. village [col. 3-7]
3. water works [col. 8-16]
4. fortification [col.17-19]
5. religious establishments [col.20-35]
6. public buildings [col.36-39]
7. heads from where revenue is derived [col.40-69]
8. population: by houses [col.70-72]
   by families [col.73-77]
9. cattle [col.78-81]

Note: Column numbers in the table were inserted by us.

Let us try to understand the coverage of the schedule of investigation. We may well presume that statistical data were collected with a view to running the administration. There was probably no connection in the approach to any scientific pursuit of knowledge. With such an immediate purpose in view, the Britishers, who inherited the fiscal system of their predecessors, were keen to have up to date information for a quick grasp on the condition of the country to be governed and naturally were also inclined to follow the methodology of their predecessors.

2.5 "The District of Giddaloor" is now situated in the Kurnool District of Andhra Pradesh around latitude 15° North and Longitude 79° East.

2.5.1 A Summutt is perhaps a unit in the fiscal administration consisting of several mauzas. Giddaloor consisted of seven Summuts.

2.5.2 Villages were divided into two kinds of subdivisions, firstly between a mauza or principal and muzra or subordinate / 54+50=104 /; secondly, between busty or inhabited and bachy-rank or ruined / 86+=8=104 /.

2.5.3 The third block is an enumeration of "Waterworks" of various types and also of dams. All natural and artificial sources of water were recorded in details.

2.5.4 The fourth block, i.e., "fortification", gives the number of "droogs", "forts" and "towers"; the total number of three types is 25 of which 10 belong to first two categories.

2.5.5 The fifth block, "religious establishment" is an enumeration of population under different religions and sects.

2.5.6 The sixth block "public buildings" takes into account of Circar Mavilly, Cutcherries, etc.

2.5.7 The seventh block "heads from which revenue is derived" mentions sources of revenue such as moosaffarkhanas, chodres, arrack shops, toddy shops, etc. - total number of sources being 30.

2.5.8 The eighth block is one of population. In this block, house numbers are given under 'terrached' 'tiled' and 'total', and families are divided seemingly according to their relation to land or land tenure, e.g., Jeer vette perhaps stands for Zirayati (Marathi) meaning probably holding normally taxed land, and, Khoshbash perhaps for families holding lightly assessed or rent free land - the divisions of families being 4.

2.5.9 The ninth block contains number of 'black c
'buffaloes', 'sheep and goats'.

2.6 We shall now proceed to discuss the second part o
"Chanashoomaries". It seems to represent a complete en
tion of existing social skill organised under the insti
of caste /~ inter-caste mobility of occupation was almos
unthinkable_/. There seems to be a predominance of the
caste (approximately above 20 per cent as shown in the
below) perhaps indicating to a reasonable good status o
crafts in the economy.

2.7 Part II of "Chanashoomaree" statement contains th
of "enumeration of castes". We are summarising the tabl
the "District of Giddaloor" containing 7 "Summutts".

Table 2.1 : Division of Population by ca

srl. no.	broad caste	no. of sub-caste	popula-tion
(1)	(2)	(3)	(4)
1.	Brahmins	3	1,184
2.	Chetries	4	114
3.	Vyshahs	3	2,100
4.	Husbandman	17	4,861
5.	Hindoo and Shudrao :		
	a. weavers	4	57
	b. dyers	3	61
	c. saddlemaker or jeengaur	1	27
6.	Shephered	3	2,795
7.	Artisans of various kinds	22	3,994
8.	Purdaish	5	22
9.	Musulman	1	1,334
10.	Miscellaneous	5	4,336
	Total	71	21,285

Note In row 7, "artisans" were classified together
approximately with an inadequate understanding
the local terms used in the table. It should
mentioned that a Descriptive Memoir is general
available with a Khanasumari table as an explan
tion of quantities presented in the table.

3. Concluding Remarks

3.1 On an examination of the status of descriptive stati on a global basis, it appears that the system of the enume tion of resources was quite developed in India. Original records of Khanasumari of pre-British days are likely to b discovered at archives in India and abroad if a thorough s is made. The investigation embodied in the system was mea ful and significant in several ways. Firstly, it was desi to have a complete grasp of material resources including m power and skill at the village level. Secondly, it is help to an understanding of a social structure based on caste- occupation. Thirdly, it included two essential sets of in tion for the state (a) sources of revenue and (b) status o defence against aggression at the village level. Fourthly, less significant is the enumeration of sources of water fo every village in a country perpetually dependent on monsoo chronically deficient in drinking water. We may perhaps s that in a way it represents a political awareness and a ki of social consciousness of the country.

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4. Quoted from No.1.

5. Works of W.H. Moreland in 1920's and these of Irf Habib in 1960's deserve a special mention.

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Appendix - I

A. A Sample List of Khana Sumari Tables

1. Survey of India Memoir No.34 for 1813. pp.31. Chana Shoomaree of the District of Giddaloor for the cycle year Angeersa or A.D. 1812.

2. Survey of India Memoir No.34 for 1813, pp.47-48. Chana Shoomaree of the District of Cummun for the cycle year Angeersa or Anno Domini 1813.

3. Survey of India Memoir No.34 for 1813, pp.69-70. Chana Shoomaree of the District of Chittavail for the cycle year Angeersa Noma or Anno Domini 1813.

4. Survey of India Memoir No.34 for 1813, pp.64 Chana Shoomaree of the District of Doopawd for the cycle year Angeersa or Anno Domini 1812.

B. Illustration of Statistical and Descriptive Memoirs

5. Survey of India Memoir No.107 (1816-20). Memoir on the portion of Travancore regarding Travancore Survey 1816-20 by B.S. Ward. The Khanasumari tables were published as referred to in the text. The unpublished portion of the Memoir contains a general table of the Mundaputtinwaudaculls or districts in the Travancore Provinces, showing the number of subdivisions and villages in each district. p.5. It appears from pp.17-22 of the Memoir that for each village, the descriptive information on situation and extent, crops cultivated, free-gift lands, rivers, tanks or waterworks, plantations, timber and other trees, production, revenue, soil, tenures, manufactures, instruments, places of worships are available. At page 29 of the said Memoir there is a table, col.1 of which contains "Description of castes and occupations", the next four cols. information on population divided into males, females, children and total and last col. on houses. At page 30 of the Memoir a table of different descriptions of land with measurements is given.

6. The Memoir No.34 referred to under srl. nos.1 to 4 also contains similar description of places surveyed.

7. Survey of India Memoir No.36 for 1817, pp.15. Descriptive Memoir of the tract surveyed in Guntur, 1817 by H.Burkes.

8. Survey of India Memoir No.168 (1809-15), pp.407-413. Survey of the Post (Sic.) 1799 of the Mysore District : Districts Ceded to the Nizam and by the Nizam to the Company in 1800; Pennaconda and Conduconda survey in 1806. By Mackenzie.

9. Survey of India Memoir No.168 (1809-15) pp. 15-18. C
Provinces under the Presidency of Fort St. George :
Statistical Geographical Account of : 1809-14 by M.D

10. Survey of India Memoir No.51 (1809-11) pp. 101-107.
contains a descriptive Memoir of the District of Jum
mudgoo.

The above list contains a sample of materials availa
Memoirs of the Survey of India in the early nineteenth c
resembling some kinds of a follow-up survey to Khanasuma
of investigation.

Appendix 2

KHANASUMARI: meaning & usage in various Indian Languages

1. Wilson, H.H. GLOSSARI OF JUDICIAL & REVENUE TERMS ...
KHANA [H &C], KHANA (khānā) [Beng. & Mal.]: A house, a dwelling, a place.

Khānashumāri, [H] Khānesumāri [Mar.] Khāni-sumari [Karn.]: A written statement of the number of houses in a village or town, and hence, a census of the population is so termed.

Bengali

2. [illegible]

3. [illegible]

Gujrati

4. Sārtha Gujarāti Jadani Kos; p. 229

Khānāsumāri - counting of population and houses.

Kannada

5.
Canesumari - stands for Census

Malayalam

6.
Canasumari - stands for Census.

Marathi

7. [illegible] p. 204
[illegible] (Census/statistics of household and people). [illegible] (of cattle?), [illegible] (of articles), [illegible] Census.

8. Punjabi

Khanasumari: Government-sponsored census of houses; Government tax per house.